

APPROVED	C.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

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CTGCAGTCTATTGGATGAAGAGTGTACATATTCATATAATTCTTAAAGTAGGCAGAAATTAAAG
GGGATGGAAATATATACTTGTACTGCCTTAGATAGTCACCAGGATGTTGTTACAGTCTTCGTTT
ACTGCTTCTGAAGCCTATACTGATAGAATTAATAAAATACTGAGAGAGAGAGAGAGGGACAGAG
AGAGAGAGGGGGAAGA
GAAGAAAACAAGGTSAGCCATCTGCTTAACCTTATGTCCACATTCTCTCAAGAGCATTGTCCCTA
TTTGTAGAATTATCTATATTGTTAAGAATCATCTCCATTGTTAAGATTTTGTGGGCTGGAGATC
CAGCTCTGTTGATAAAGTGCTTGCCTAACATGCATGAAGTCCTAGGTTCTATTCCTAAGGCTAC
ATAAAACCTTGTGTTGTGATGAATGCCTGTAATCCAGTACGCAGCAAGGAGAGACAAGGAGGA
TCAGAAGCTTAAGGACATCATTGTTGTACATAGTGAGTTTGAGGAAAGCTGAGGTTACATGGAAC
TCTCTCTCTCTCAAAAACAAAACAAAACAAAACCTTCTACTAATATTCTGGATTCTGTT
TGATTTTATAGGATCTCAAGAGCATGCTGACGTCATTTATGTGTTTCCATCAGATACAGACAGAG
ATCATAAACATTTAACTCATTGATTATATGTTGAGAGTTGTCCCTCAAGAACCAATGGCCAAAC
ATCCACTGAGGATACACGGAAGCTTAGAAAATCTCTAATTAAAATCCTGACATAATGGAAGTGC
TCACAAACCAGCCAACACCTAATAAAACCAGTGGAAGAGCAACAACCTCGGCATTTTCTACTT
TGAATCCTGCCAACCCCTTTTCTAGCCATACTCTTGCTACTCATAGCATATACTGTGATCCTA
ATCATGGGCATTTTGGAAACCTCTCTCTTATCATCATCATCTTTAAGAAACAGAGAGAAGCTC
AAAATGTTACCAACATACTGATTGCCAACCTGTCCCTCTCTGACATCTTGGTGTGTGTCATGTG
CATCCCTTTTACGGTCATCTACACTCTGATGGACCACTGGGTATTTGGGAACACTATGTGTAAA
CTCACTTCCTACGTGCAAAGTGTCTCAGTTTCTGTGTCCATATTCTCCCTTGTTGTTGATTGCTA
TTGAACGATATCAGCTGATTGTGAACCCCGTGGCTGGAAACCCAGAGTAGCTCATGCCTATTG
GGGATCATCTTGATTGTTGGCTCATTTCTCTGACATTGTCTATTCCCTTATTCCCTGTCTACCAC
CTCACCAATGAGCCCTTTCATAATCTCTCTCTCCCTACTGACATCTACACCCACCAGGTAGCTT
GTGTGGAGATTGTCCTTCTAAACTGAACCAACTCCTCTTTTCTACATCATTATTTATGCTCCA
GTATTTTGTCCCTCTGGGTTTCATTCTTATCTGCTACCTGAAGATCGTTCTCTGCCTCCGAAAA
AGAACTAGGCAGGTGGACAGGAGAAAGGAAAATAAGAGCCGTCTCAATGAGAACAAGAGGGTAA
ATGTGATGTTGATTTCCATCGTAGTGACTTTTGGAGCCTGCTGGTTGCCCTTGAACATTTTCAA
TGTCATCTTCGACTGGTATCATGAGATGCTGATGAGCTGCCACCACGACCTGGTATTTGTAGTT
TGCCACTTGATTGCTATGGTTTCTACTTGCATAAATCCTCTCTTTTATGGATTTCTCAACAAAA
ACTTCCAGAAGGATCTAATGATGCTTATTCACCCTGTTGGTGTGGTGAACCTCAGGAAAGTTA
TGAAAATATTGCCATGTCTACTATGCACACAGATGAATCCAAGGGATCATTAACCTGGCTCAC
ATACCAACAGGCATATAGAACTGGTAAGCAAAATCAAAGCCCTTCTGTTATGAAAGAAAGAGA
AGAAATAGTATGGAATAGGGCAAGGTGCAGAGGAAGCCAGACTTAAACACATAATATCTTTGGG
CCCAGTTTTGCTTTAAGTTAAGCATGTCTACTCCATTTCAGCCATAGAACACACAGAGATTTATC
CCTACCCTTTCTTTTTTCTTTTGGGAAGAATAAATACTTAAACAACCTAGACATCATTACTGAG
GAAGAGAACAAAATGAGAGAGCATACAAGGACAGCAGAGATGTCTGGGGTACAAAATTCACGT
TATTCGCTGGAATAGCTAGAAAGTTATTAGTTGTGCTGCAG (SEQ ID NO:1)

FIGURE 1

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

[CTGCAGTCTATTGGATGAAGAGTGTACATATTCATATAATTCTTAAAGTAGGCAGAAAT
TAAAGGGGATGGAAATATATACTTGTACTGCCTTAGATAGTCACCAGGATGTTGTTACAG
TCTTCGTTTACTGCTTCTGAAGCCTATACTGATAGAATTAATAAAAATACTGAGAGAGAGA
GAGAGGGACAGAGAGAGAGAGGGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA
GAGAGAGAGAGAGAAGAGAAGAAAACAAGGTTAAGCCATCTGCTTAACTTATGTCCACAT
TCTCTCAAGAGCATTGTCTATTTGTAGAATTATCTATATTGTTAAGAATCATCTCCATT
GTTAAGATTTTGTGGGCTGGAGATCCAGCTCTGTTGATAAAGTGCTTGCCTAACATGCAT
GAAGTCCTAGGTTCTATTCCCAAGGCTACATAAAACCTTGTGTTGTGATGAATGCCTGTA
ATCCCAGTACGCAGCAAGGAGAGACAAGGAGGATCAGAAGCTTAAGGACATCATTTTGTGA
CATAGTGAGTTTGAGGAAAGCTGAGGTTACATGGAACCTCTCTCTCTCTCAAAAAACAAAAC
AAAACAAAACAAAACCTTCTACTAATATTCTGGATTCTGTTTGATTTTTAGGATCTCAAG
AGCATGCTGACGTCATTTATGTGTTTCCATCAGATACAGACAGAGATCATAAACATTTAA
CTCATTGATTATATGTTGAGAGTTGTCCCTCAAGAACCAATGGCCAAACATCCACTGAGG
ATACACGGAAGCTTAGAAAATCTCTAATTAATAATCCTGACATAATGGAAGTGCTCACAAA
CCAGCC] AACACCTAATAAAAACCAAGTGGCAAGAGCAACAACCTCGGCATTTTTCTACTTTG
AATCCTGCCAACCCCTTTTCTAGCCATACTCTTGCTACTCATAGCATATACTGTGATCC
TAATCATGGGCATTTTTGGAAACCTCTCTCTTATCATCATCATCTTTAAGAAACAGAGAG
AAGCTCAAAATGTTACCAACATACTGATT [GCCAACCTGTCCCTCTCTGACATCTTGGTG
TGTGTCATGTGCATCCCTTTTACGGTCATCTACACTCTGATGGACCACTGGGTATTTGGG
AACACTATGTGTAAACTCACTTCCTACGTGCAAAGTGTCTCAGTTTCTGTGTCCATATTC
TCCCTTGTGTTGATTGCTATTGAACGATATCAGCTGATTGTGAACCCCGTGGCTGGAAA
CCCAGAGTAGCTCATGCCTATTGGGGGATCATCTTGATTGGCTCATTTCTCTGACATTG
TCTATTCCCTTATTCCCTGTCTTACCACCTCACCAATGAGCCCTTTCATAATCTCTCTCTC
CCTACTGACATCTACACCCACCAGGTAGCTTGTGTGGAGATTTGGCCTTCTAAACTGAAC
CAACTCCTCTTTTCTACATCATTATTTATGCTCCAGTATTTTGTCCCTCTGGGTTTCATT
CTTATCTGCTACCTGAAGATCGTTCTCTGCCTCCGAAAAAGAACTAGGCAGGTGGACAGG
AGAAAGGAAAAATAAGAGCCGTCTCAATGAGAACAAGAGGGTAAATGTGATGTTGATTTCC
ATCGTAGTGACTTTTGGAGCCTGCTGGTTGCCCTTGAACATTTTCAATGTCATCTTCGAC
TGGTATCATGAGATGCTGATGAGCTGCCACCACGACCTGGTATTTGTAGTTTGCCACTTG
ATTGCTATGGTTTCTACTTGCATAAATCCTCTCTTTTATGGATTTCTCAACAAAACTTC
CAGAAG] GATCTAATGATGCTTATTCACCACTGTTGGTGTGGTGAACCTCAGGAAAGTTA
TGAAAATATTGCCATGTCTACTATGCACACAGATGAATCCAAGGGATCATTAATACTGGC
TCACATACCAACAGGCATATAGAACTGGTAAGCAAAATCAAAGCCCTTCTGTTATGAAA
GAAAGAGAAGAAATAGTATGGAATAGGGCAAGGTGCAGAGGAAGCCAGACTTAAACACAT
AATATCTTTGGGCCAGTTTGTCTTAAGTTAAGCATGTCTACTCCATTTCAGCCATAGAA
CACACAGAGATTTATCCCTACCCTTTCTTTTTTCTTTTGGGAAGAATAATACTTAAACA
ACCTAGACATCATTACTGAGGAAGAGAAACAAAATGAGAGAGCATACAAGGACAGCAGAG
ATGTCTGGGGTACAAAATTCACGTTATTCGCTGGAATAGCTAGAAAAGTTATTAGTTGTGC
TGCAG (SEQ ID NO:1)

FIGURE 2A

APPROVED	O.G. FIG.	
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Gene Sequence Structure

*

846 bp

Sequence Deleted

1047 bp

Size of CDS: 2281 bp



Targeting Vector* (genomic sequence)

Construct Number: 2762

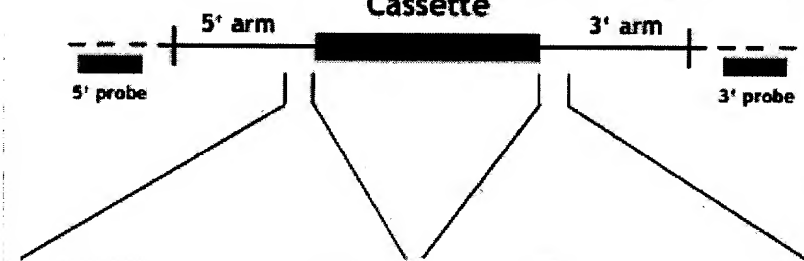
Arm Length:

5': 5 kb

3': 0.5 kb

LacZ-Neo

Cassette



———— Targeting Vector
- - - - Endogenous Locus

* Not drawn to scale

5' >TTTAGGATCTCAAGAGCATGC
TGACGTCATTTATGTGTTTCCATC
AGATACTGACAGAGATCATAAACA
TTTAACCTCATTGATTATATGTTGA
GAGTTGTCCCTCAAGAACCAATGG
CCAAACATCCACTGAGGATACACG
GAAGCTTAGAAAATCTCTAATTAA
AATCCTGACATAATGGAAGTGCTC
ACAAACCAGCC<3'
(SEQ ID NO:2)

5' >GCCAACCTGTCCCTCTCTGAC
ATCTTGGTGTGTGTCATGTGCATC
CCTTTTACGGTCATCTACACTCTG
ATGGACCACTGGGTATTTGGGAAC
ACTATGTGTAAACTCACTTCCTAC
GTGCAAAGTGCTCAGTTTCTGTG
TCCATATTCTCCCTTGTGTTGATT
GCTATTGAACGATATCAGCTGATT
GTGAACCCCG<3'
(SEQ ID NO:3)

FIGURE 2B